



BUILDING A MANIFESTO FOR GAME ACCESSIBILITY

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TODAY'S AGENDA

- Accessibility?
- Who the SIG are, and 10 years at GDC
- Which advocacy activities have worked in the past?
- Gamers' ideas on advocacy
- Our ideas on what to tackle next
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igda international game
developers association

game accessibility special interest group

tinyurl.com/gasig-email

igda-gasig.org

10+ YEARS WORD CLOUD



GDC



GDC 2004 — OUR FIRST ROUNDTABLE

The only non-SIG person to attend to a Finnish developer, who walked into the session by accident.

ACCESSIBILITY IDOL



GAME ACCESSIBILITY

...BECAUSE EVERYONE WANTS TO SAVE THE UNIVERSE...

BETWEEN 10% AND 20% OF THE PEOPLE IN A COUNTRY DO NOT PLAY COMPUTER GAMES BECAUSE OF A DISABILITY. FORTUNATELY MANY GAMES CAN BE MADE MORE ACCESSIBLE WITH SIMPLE AND INEXPENSIVE ADJUSTMENTS.



EFFECTS ON GAMING

- CANNOT HEAR AUDIO CUES SUCH AS SPEECH, FOOTSTEPS, GUN SHOTS, ETC.
- CANNOT FOLLOW CUTSCENES.

POSSIBLE SOLUTIONS

- PROVIDE CLOSED CAPTIONING.
- PROVIDE A "MAGNA" STYLE SCREEN TO LOCATE SOUNDS.
- FLAG DANGEROUS OR IMPORTANT SITUATIONS AND EVENTS.



EFFECTS ON GAMING

- DIFFICULT TO READ OR UNDERSTAND THE MANUAL.
- DIFFICULT TO SOLVE SOME PUZZLES BECAUSE THEY REQUIRE MATHEMATICAL OR LOGICAL SKILLS.

POSSIBLE SOLUTIONS

- ADD A TUTORIAL MODE.
- EASY TO UNDERSTAND MANUALS.
- IN-GAME HINTS TO ASSIST A PLAYER.
- ALTERNATIVE SOLUTIONS FOR PUZZLES REQUIRING DIFFERENT SKILLS.



EFFECTS ON GAMING

- CANNOT USE A STANDARD CONTROLLER EASILY OR AT ALL.
- SLOWER REACTION SPEED AND REFLEXES.

POSSIBLE SOLUTIONS

- SUPPORT ALTERNATIVE CONTROLLERS.
- SCALE DIFFICULTY LEVELS TO MAKE IT POSSIBLE TO SUPPORT STANDARD CONTROLLERS.
- ALLOW REMAPPING OF CONTROLS.
- PROVIDE CONTROL OVER GAME SPEED.
- PROVIDE ASSISTANCE IN THE GAME, SUCH AS AUTO-TARGETING, ETC.



EFFECTS ON GAMING

- CANNOT SEE USUALS ON THE SCREEN.
- CANNOT SEE USUALS WITHOUT HIGH CONTRAST.
- CANNOT DISTINGUISH CERTAIN COLORS.
- CANNOT SEE SMALL USUALS.
- CANNOT READ TEXT.

POSSIBLE SOLUTIONS

- PROVIDE AUDIO CUES ABOUT EVENTS, ITEMS AND CHARACTERS.
- ALLOW THE PLAYER TO CONTRAST CONTRAST, BRIGHTNESS, COLOR SCHEMES AND FONT CHARACTERISTICS.
- PROVIDE AUDIO DESCRIPTIONS OR MAKE THE GAME USABLE WITH THIRD PARTY SCREEN READERS.
- ALLOW RESAMPLING OF USUALS AND FONTS.

GDC 2010 — CONTROLLER HACK POSTER SESSION

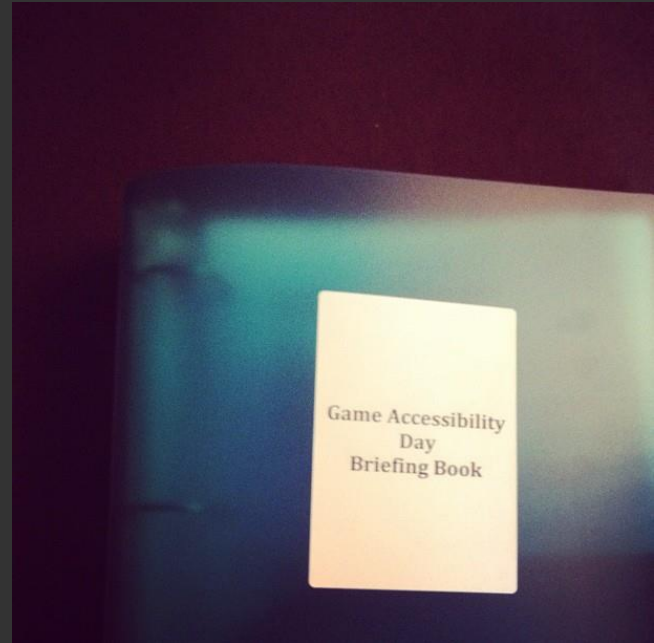


GAME ACCESSIBILITY DAY/ ENABLED PLAY

A Full Day of Accessibility Talks



White House Briefing Booklet



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Accessibility in Games: Motivations and Approaches

June 29, 2004





Game accessibility guidelines

[BASIC](#)[INTERMEDIATE](#)[ADVANCED](#)[FULL LIST](#)[WHY AND HOW](#)

Use an easily readable default font size

“With how small the text is in games like GTA V, everything turns out blurred and unclear. I accidentally spent \$4,500 on a car because of that.

Africa_Whale, via [Reddit](#)

HELP & ADVICE



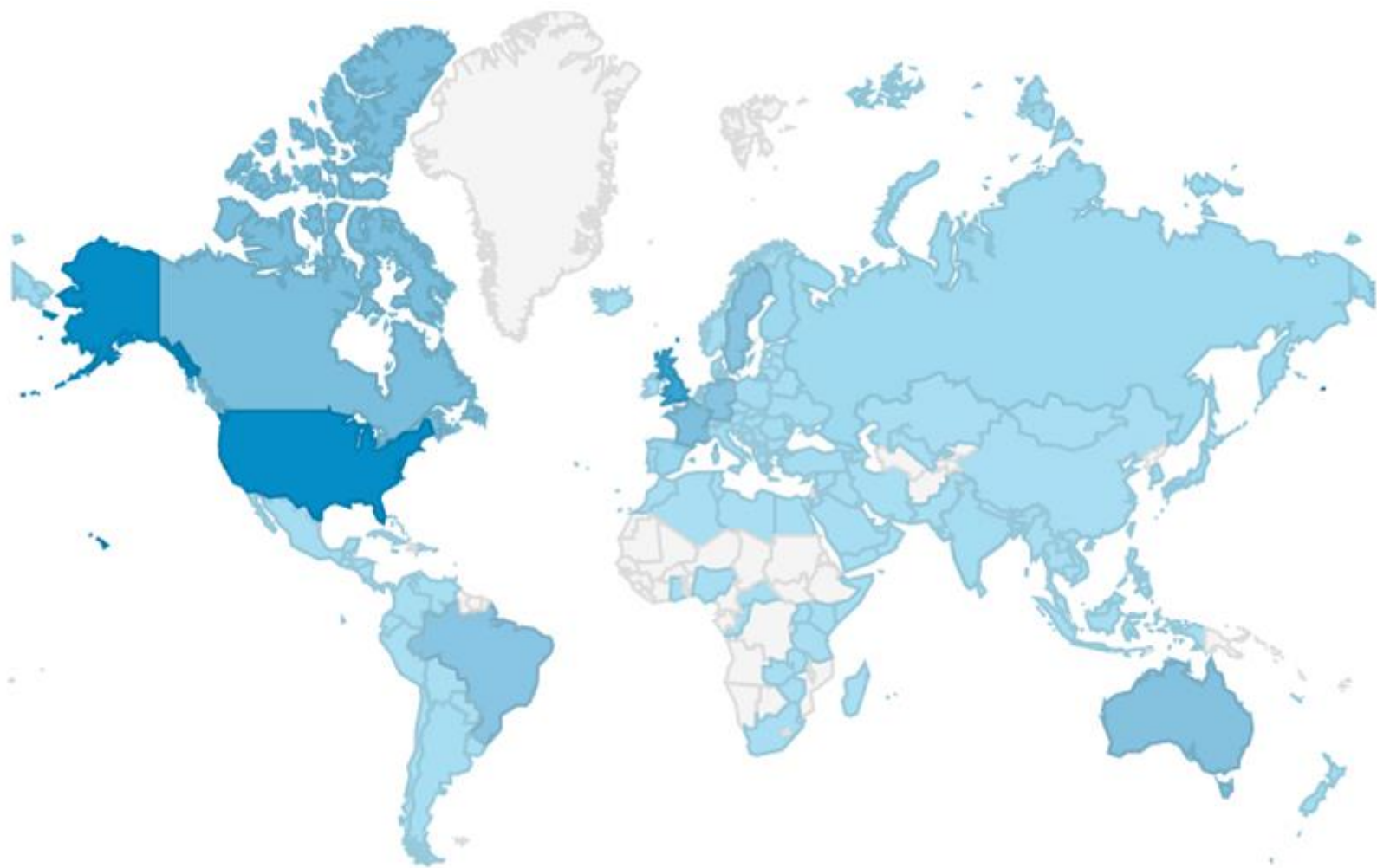
[How to work with these guidelines](#)

Vision (basic)

Small text size is a very common complaint amongst people with vision impairments, whether medical (such as long sightedness) or situational (such as small mobile



**CHAIRMAN'S AWARDS
FOR ADVANCEMENTS
IN ACCESSIBILITY**



SOME VISITORS FROM JAN 2015 – FEB 2015





KEY GA-SIG MOMENT FROM THE PAST 10 YEARS

ACCESSIBILITY@ GLOBAL GAME JAM





GLOBAL GAME JAM 2011

CENTRAL ORLANDO CHAPTER
“MERIT COMPETITION”

GAIYA:THE ORIGINS OF DEEPROOT
TEAM EPIC WEDGIE

GGJ DIVERSIFIERS

“DIVERSIFIERS ARE A FREE-FOR-ALL VOLUNTARY LIST OF SECONDARY CONSTRAINTS, THAT THE INDIVIDUAL TEAMS CAN CHOOSE TO GO FOR, OR NOT, AS THEY PLEASE. ” [1]

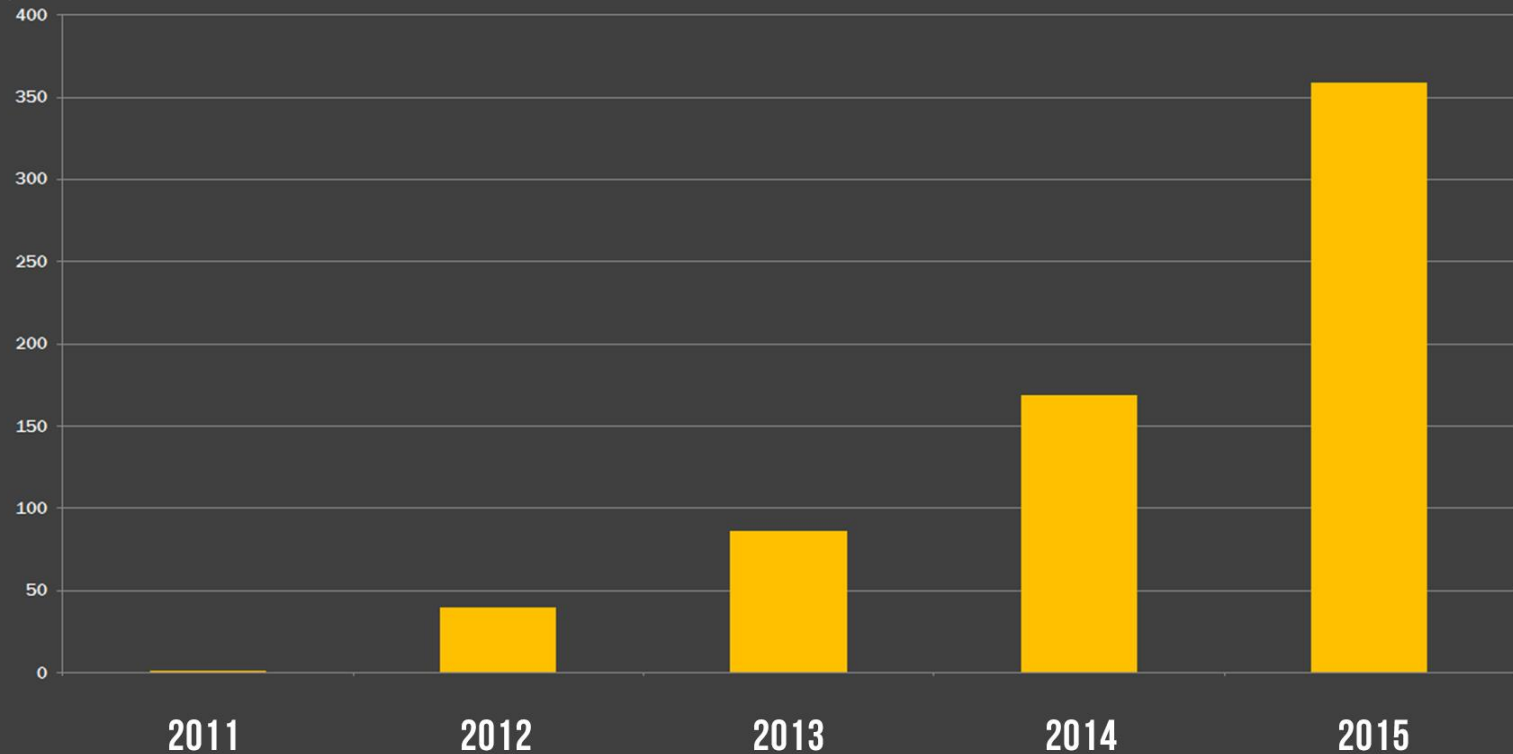
[1] [HTTP://GLOBALGAMEJAM.ORG/GLOBAL-GAME-JAM-DIVERSIFIERS](http://globalgamejam.org/global-game-jam-diversifiers)

DIVERSIFIERS?

“INCLUSIVE: THE GAME IS SPECIFICALLY DESIGNED TO INCLUDE PEOPLE WITH A GIVEN DISABILITY.” (2013)

“STEPHEN HAWKING CAN PLAY THIS - IN THE GAME EVERYTHING (INCLUDING ANY MENUS) CAN BE NAVIGATED WITH ONE BUTTON, WITHOUT ANY NEED FOR QUICK / PRECISELY TIMED PRESSES.”
(2015)

NUMBER OF GGG GAMES USING ACCESSIBILITY DIVERSIFIERS



SO **WHAT** DID GLOBAL GAME JAM
CONTESTANTS DO **WITH DIVERSIFIERS?**

BROW BROW PARTY WALRUS





BROW BROW PARTY WALRUS

WINNER: MOST ORIGINAL CONCEPT
WINNER: ACCESSIBILITY

WHAT WAS **GAINED**?

ACCESSIBILITY INSPIRES CREATIVITY

MORE ACCESSIBLE GAMES

AWARENESS

DISPEL MISCONCEPTIONS ABOUT TIME/COMPLEXITY



PUZZLE RETREAT



FOLLOWING IN FILM VICTORIA'S FOOTSTEPS

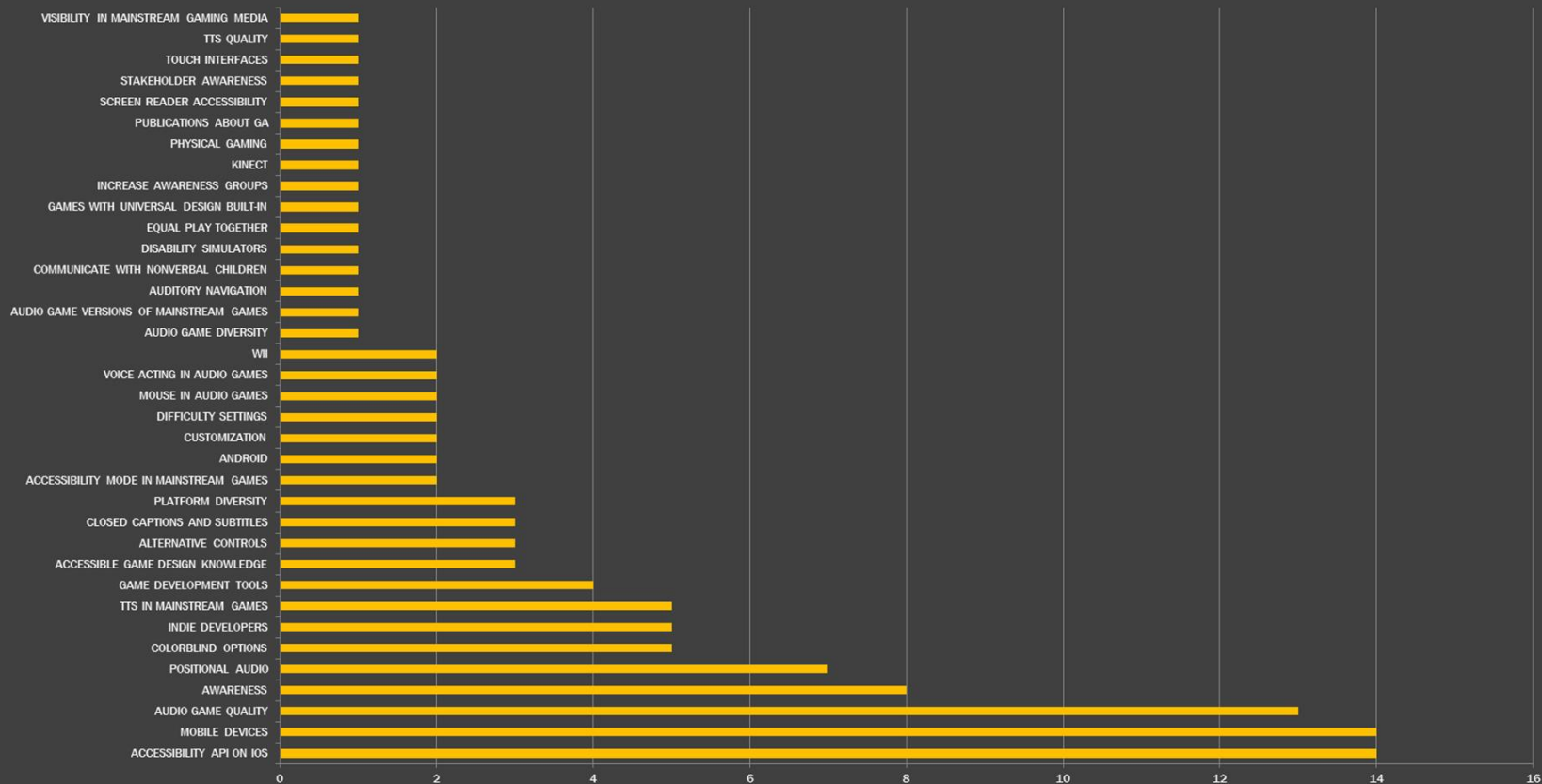


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WHAT DID GAMERS THINK?

THE MOST IMPORTANT DEVELOPMENTS IN GA DURING THE PAST 10 YEARS



THE MOST IMPORTANT DEVELOPMENTS IN GA DURING THE PAST 10 YEARS



THE MOST IMPORTANT DEVELOPMENTS IN GA DURING THE PAST 10 YEARS

ACCESSIBILITY API ON IOS

AUDIO GAME QUALITY

MOBILE DEVICES

THE MOST IMPORTANT DEVELOPMENTS IN GA DURING THE PAST 10 YEARS



THE MOST IMPORTANT DEVELOPMENTS IN GA DURING THE PAST 10 YEARS

POSITIONAL AUDIO

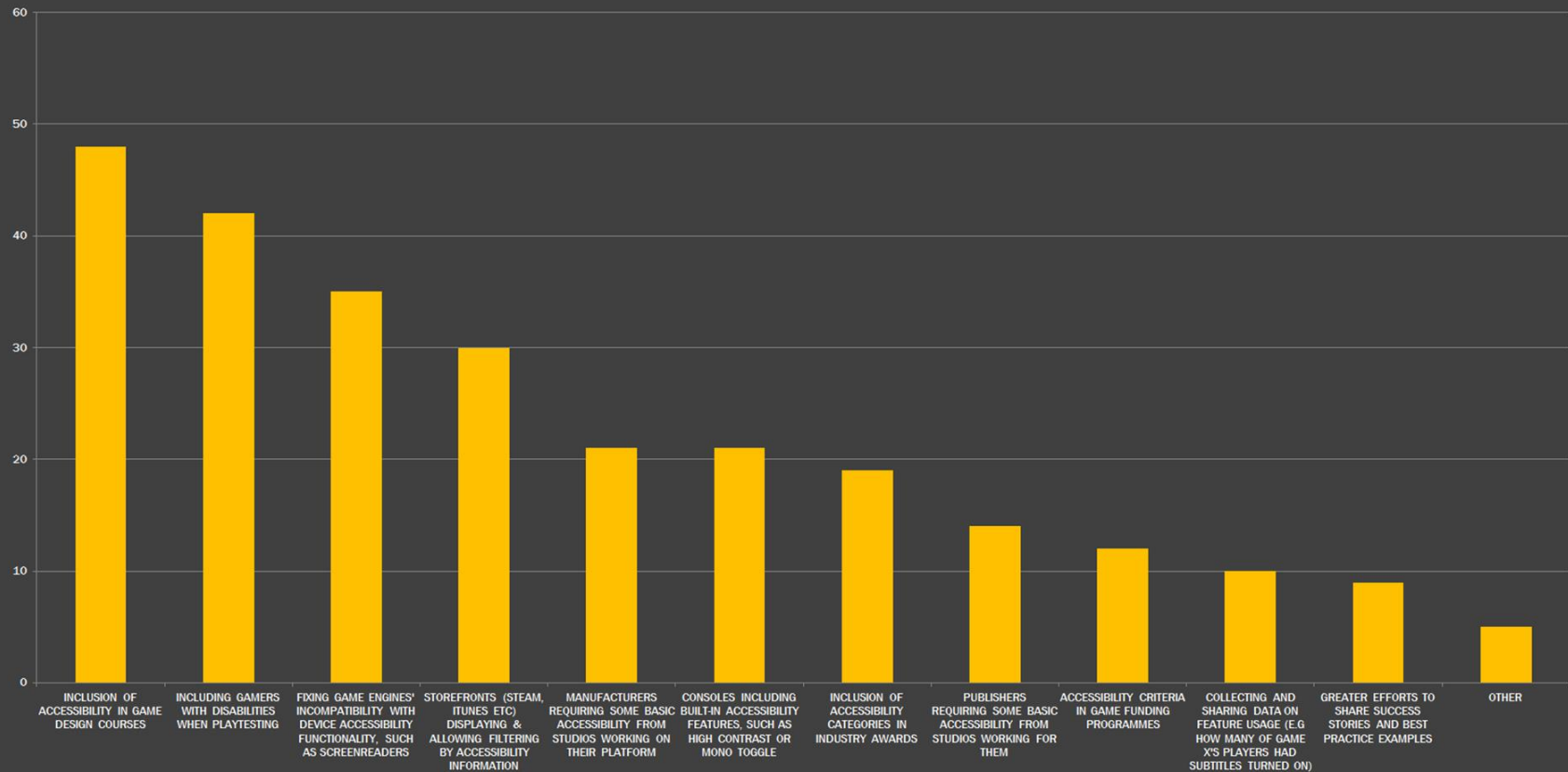
TTS IN MAINSTREAM GAMES

COLORBLIND OPTIONS

ALTERNATIVE CONTROLS

SO WHAT'S NEXT?

TOP THREE ADVOCACY GOALS FOR ACCESSIBILITY IN GAMING



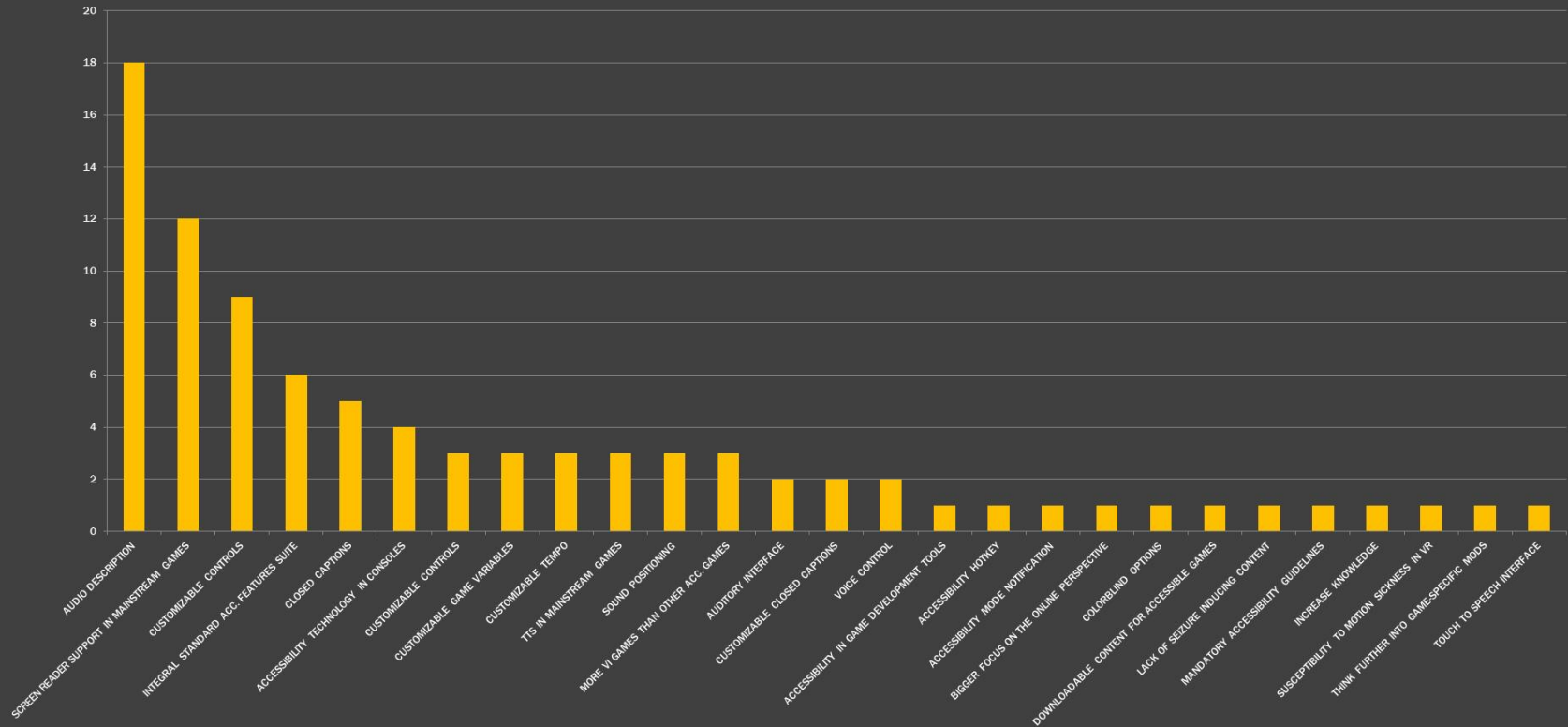
TOP THREE **ADVOCACY POINTS**

INCLUSION OF **GAME ACCESSIBILITY** IN DESIGN COURSES

THE INCLUSION OF **GAMERS WITH IMPAIRMENTS** WITH **PLAYTESTS**

FIXING **GAME ENGINES** INCOMPATIBILITY WITH
DEVICE ACCESSIBILITY FUNCTIONALITY SUCH AS SCREENREADERS

FAVOURITE FUTURE ACCESSIBILITY FEATURE/CONSIDERATION



FAVOURITE FUTURE ACCESSIBILITY FEATURE/CONSIDERATION

[illegible]

FAVOURITE FUTURE ACCESSIBILITY FEATURE/CONSIDERATION

SCREENREADER SUPPORT IN MAINSTREAM GAMES
CUSTOMIZABLE CONTROLS
AUDIO DESCRIPTION

INTEGRAL STANDARD ACC. FEATURES SUITE
CLOSED CAPTIONS
SOUND POSITIONING
CUSTOMIZABLE TEMPO
TTS IN MAINSTREAM GAMES
CUSTOMIZABLE GAME VARIABLES
VOICE CONTROL
AUDIO INPUT/OUTPUT
MORE VI GAMES THAN OTHER ACC. GAMES
ACCESSIBILITY TECHNOLOGY IN CONSOLES
CUSTOMIZABLE CLOSED CAPTIONS

FAVOURITE FUTURE ACCESSIBILITY FEATURE/CONSIDERATION

ACCESSIBILITY IN GAME DEVELOPMENT TOOLS



ACCESSIBILITY IN GAME DEVELOPMENT TOOLS

INTEGRAL STANDARD ACC. FEATURES SUITE



ACCESSIBILITY TECHNOLOGY IN CONSOLES

FAVOURITE FUTURE ACCESSIBILITY FEATURE/CONSIDERATION

CUSTOMIZABLE CONTROLS

AUDIO DESCRIPTION

SOUND POSITIONING

CUSTOMIZABLE TEMPO

CUSTOMIZABLE GAME VARIABLES

ACCESSIBILITY TECHNOLOGY IN CONSOLES

CUSTOMIZABLE CLOSED CAPTIONS

SCREENREADER SUPPORT IN MAINSTREAM GAMES

INTEGRAL STANDARD ACC. FEATURES SUITE

CLOSED CAPTIONS

US IN MAINSTREAM GAMES

VOICE CONTROL

AUXILIARY INTERFACE

MORE VI GAMES THAN OTHER ACC. GAMES

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EDUCATION

- Accessible design in game courses
- Design for all
- Research and practice



GAME MODS: DOOM3 (CC)



tinyurl.com/o68wbx5

DESIGN METHOD: UA-GAMES

[Home page](#)

UA-Games

About UA-Games

[▶ Background](#)

[▶ Publications](#)

[▶ Games](#)

[▶ Links](#)

[▶ Contact Info](#)

UA-GAMES (Universally Accessible Games)

Universally Accessible Games (UA-Games) constitute a research activity of [ICS-FORTH](#). In this context, we research, design and develop Universally Accessible Games (UA-Games) methods and software tools.

What are UA-Games?

The concept of UA-Games has been proposed as a means to overcome the current approach to achieve game accessibility coupled with high interaction quality for people with diverse abilities.

UA-Games are interactive computer games that:

tinyurl.com/o68wbx5

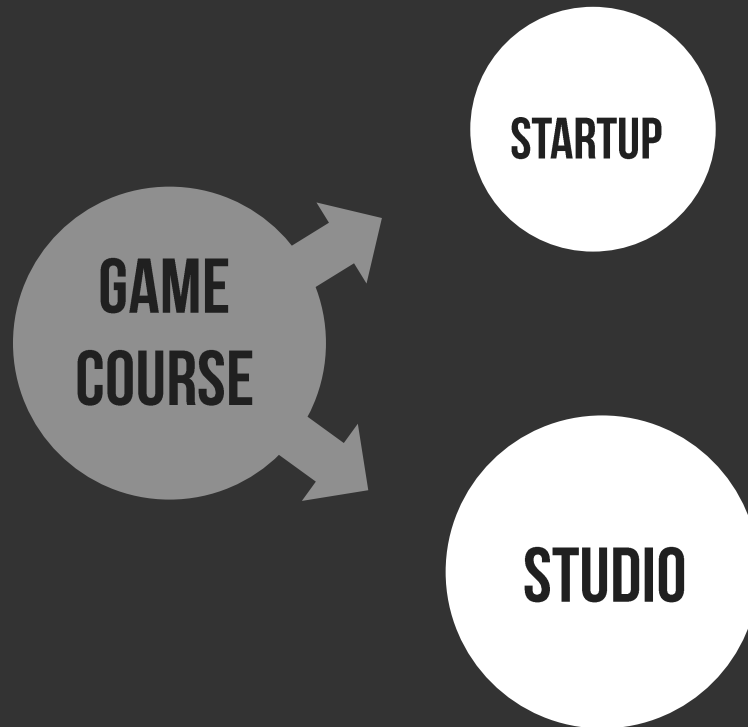
RESEARCH PAPERS

- Collection: citeulike.org/group/8459
- Survey with facts and numbers: tinyurl.com/pz8se3m

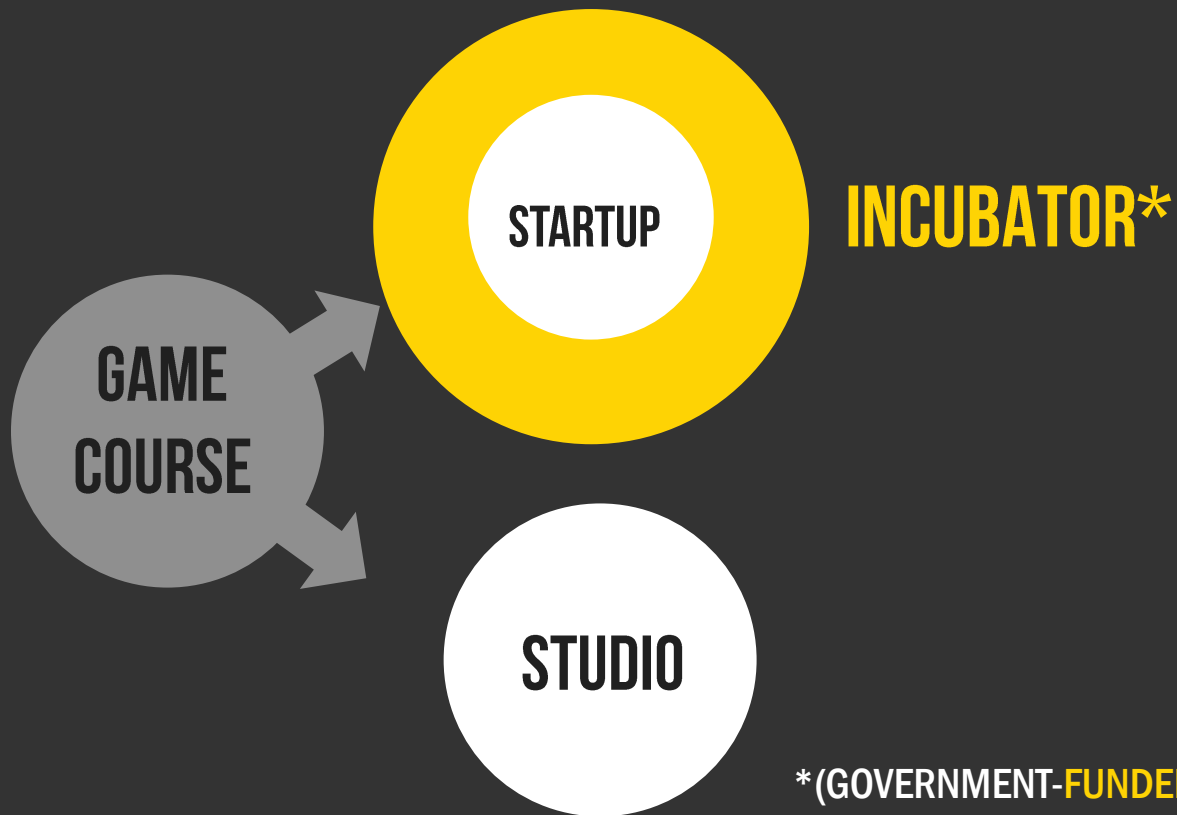
WHAT'S NEXT?

GAME ACCESSIBILITY & INCUBATORS

WHY INCUBATORS?



WHY INCUBATORS?



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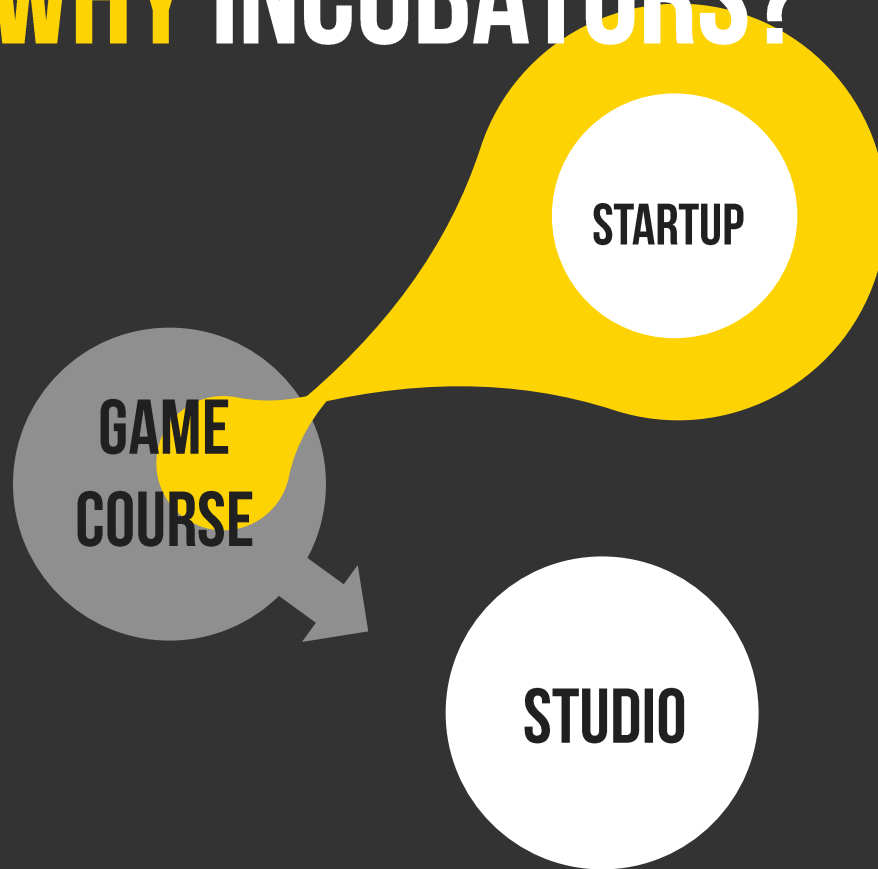
“... SERVE AS **GATHERING SPACE** FOR DEVELOPERS LARGE AND SMALL WHILE NURTURING A NEW GENERATION OF CREATORS.” [1]

[1] [HTTP://WWW.USGAMER.NET/ARTICLES/DUTCH-GAME-GARDEN](http://www.usgamer.net/articles/dutch-game-garden) (FEB 26TH 2015)



SUPPORT COMMUNITY
NETWORK LUNCHES
GAME DEVELOPMENT TRAINING AND BOOTCAMPS
SUPPORT ENTREPRENEURSHIP
SHOWCASE GAMES

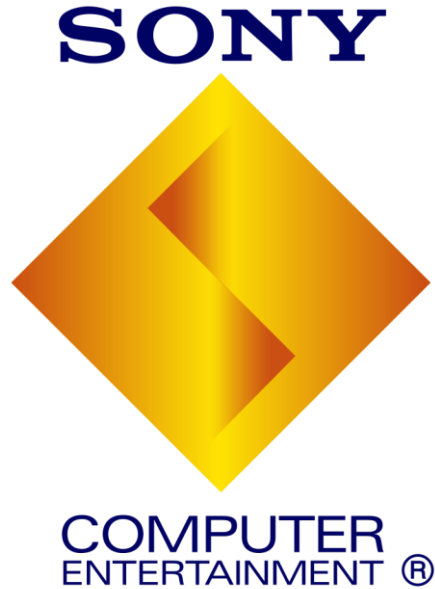
WHY INCUBATORS?














ACCESSIBILITY INTEGRATION IN INCUBATORS - TOP 3

INCLUDE ACCESSIBILITY IN THE **PITCH CRITERIA**
INCLUDE GAME ACCESSIBILITY IN **TRAINING** AND **BOOTCAMPS**
SHOWCASE ACCESSIBLE GAME EXAMPLES

FIRST PARTY CERTIFICATION



“If you can’t play it, you can’t take it back. You’ve wasted the money. Four times we’ve had unplayable games we can do nothing with.”

	Alcohol
	Colour Blind Accessible
	Comic Violence
	Criminal Activity
	Deaf Accessible
	Discrimination
	Drugs
	Epilepsy Warning
	Extreme Violence
	Fear
	Gambling
	Game Controller Required
	Nudity
	Online Gameplay
	Remappable Controls

Narrow by feature

- ☐ Steam Achievements
- ☐ Full controller support
- ☐ Steam Trading Cards
- ☒ Captions available
- ☐ VR Support
- ☐ Steam Workshop
- ☐ Partial Controller Support
- ☐ Steam Cloud
- ☐ Valve Anti-Cheat enabled
- ☐ Includes Source SDK

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OVER TO YOU

- Have you been involved with efforts to spread awareness/uptake of accessibility? How have they gone?
- Is there any one thing that you think would make the biggest difference?
- Is there anything that you've heard or read today that has inspired you or that you want to get involved with?

IGDA-GASIG tinyurl.com/gasig-email

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Richard Van Tol (HKU University of the Arts Utrecht) @creativeheroes

IGDA-GASIG ROUND TABLE

Thursday, 4:00pm-4:50pm, north hall, room 110

NO MORE EXCUSES — YOUR GUIDE TO ACCESSIBLE DESIGN

Friday, 3pm-4pm, south hall, room 304